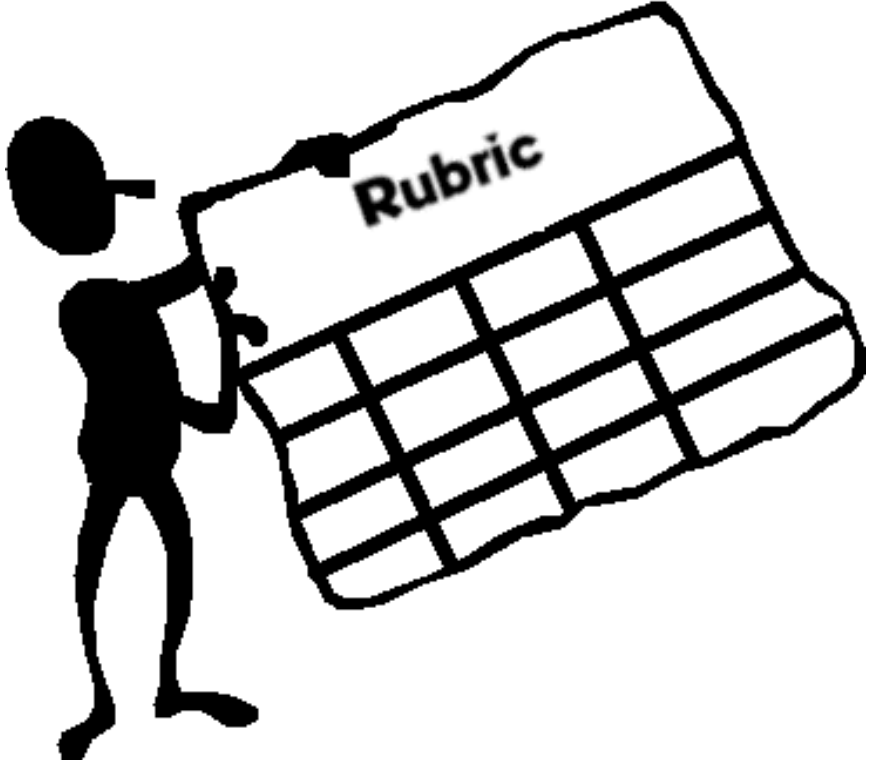


Performance Rubric Pilot

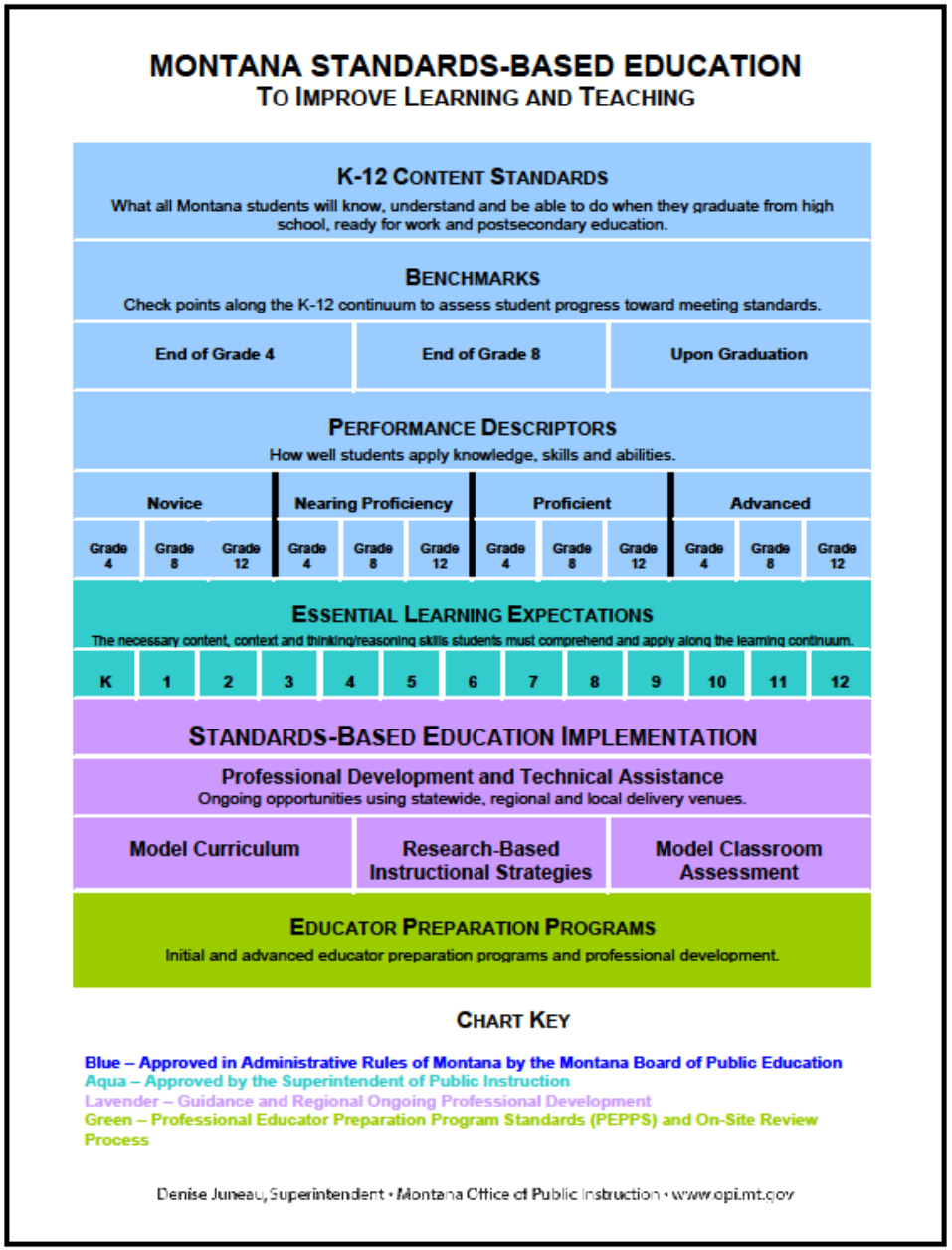
Science, Technology, and Information Literacy/Library Media

OPI Assessment Conference
January 20-21, 2011
Billings, Montana

Montana
Office of Public Instruction
Denise Juneau, State Superintendent
opi.mt.gov

- T or F? Standards are written by OPI employees in a secret basement room at the Holiday Inn in Helena.
- T or F? Standards are written for teachers to use to determine instructional activities.
- T or F? Checklists of standards are sufficient evidence of student learning.
- T or F? Standards are a new educational fad.
- T or F? 9th grade science teachers only need to know their content standards and ELE.

Standards Framework



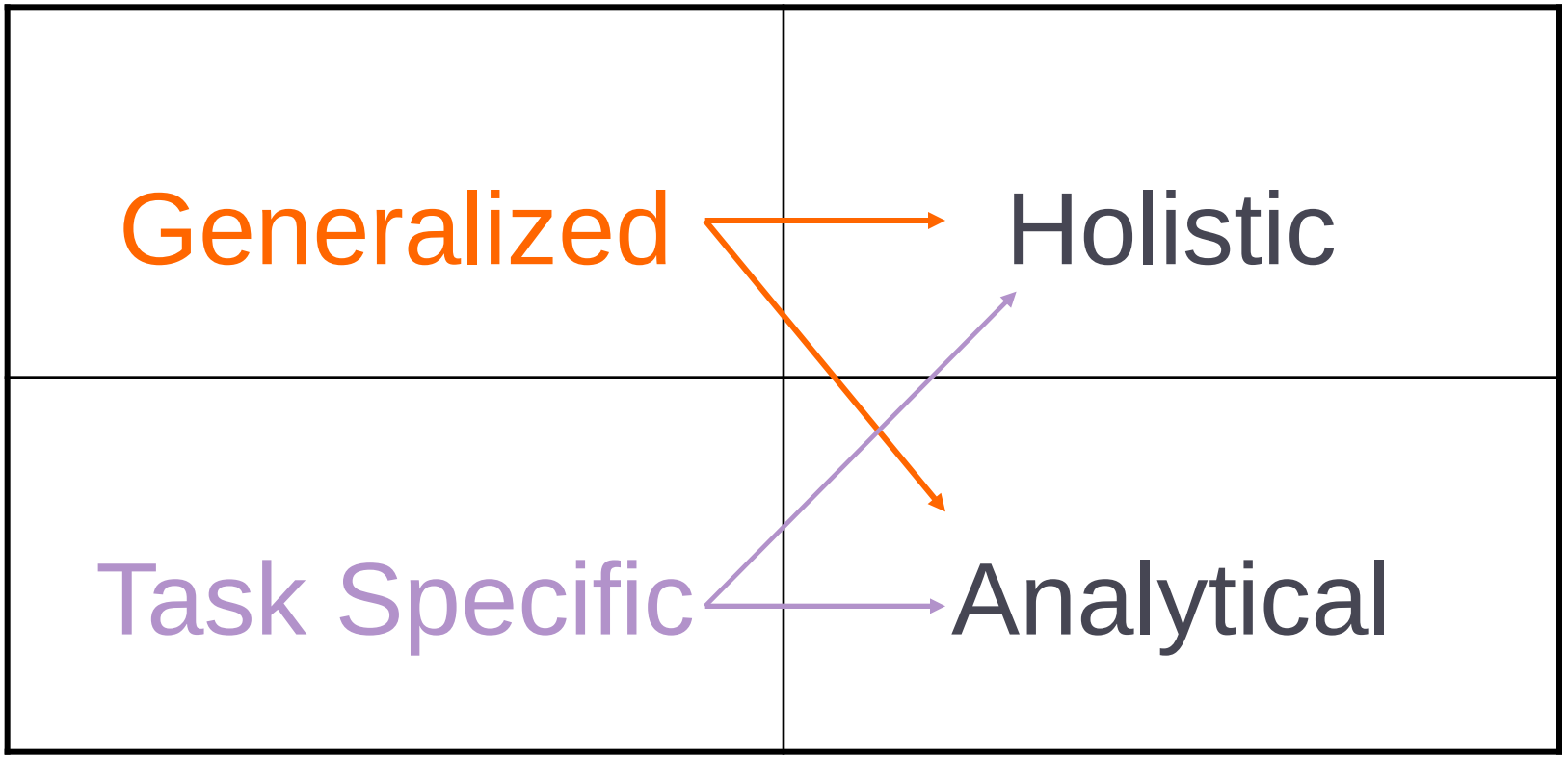
Performance Rubric

A set of criteria describing students' performance, along a continuum from advanced to novice, that define how well they apply the knowledge and skills contained in the Essential Learning Expectations.

Purpose of Pilot

- Test structure of draft performance rubrics
  - *What components of the rubric structure are easy to understand? What components are not clear?*
- Examine content of draft performance rubrics
  - *Which rubrics/criteria adequately describe the level of student performance? What revisions do you suggest for rubrics that do not adequately describe student performance?*
- Determine professional development requirements for implementation
  - *What would the professional development look like in order for teachers to have the best support to use the rubrics?*

Rubric Formats



Descriptions of Expertise

Science

- Performance Rubrics for Montana Science Content Standard 3: Benchmark 4 ELE D-F Grade 9-12

Big Idea Essential Learning Expectation D-F: Energy Flow through Ecosystems				
Criteria	**Advanced**	**Proficient**	**Nearing Proficiency**	**Novice**
Food chain vs. Food web	Student explains the differences between a food chain and a food web with models and additional details.	Student explains the differences between a food chain and a food web.	Student defines the terms food chain and food web, but has difficulty demonstrating their relationship.	Student defines the terms food chain and food web.
Food Pyramid	Student provides comprehensive analysis of trophic levels in a pyramid model in terms of energy transfer, biomass, and number of individuals.	Student explains trophic levels in a pyramid model in terms of energy transfer, biomass, and number of individuals.	Student explains trophic levels in a pyramid model with limited details of energy transfer, biomass, and number of individuals.	Student constructs a pyramid model of trophic levels.
Solar Energy	Student recognizes that the sun is the ultimate source of energy in most ecosystems and can demonstrate the energy transfers in detail.	Student recognizes that the sun is the ultimate source of energy in most ecosystems.	Student recognizes that the sun is the ultimate source of energy but fails to recognize the connection within ecosystems.	Student recognizes that the sun is the ultimate source of energy.

Technology

Performance Rubrics for Montana Technology Content Standard 1: Benchmark 1-5: ELE A-E Grade 4

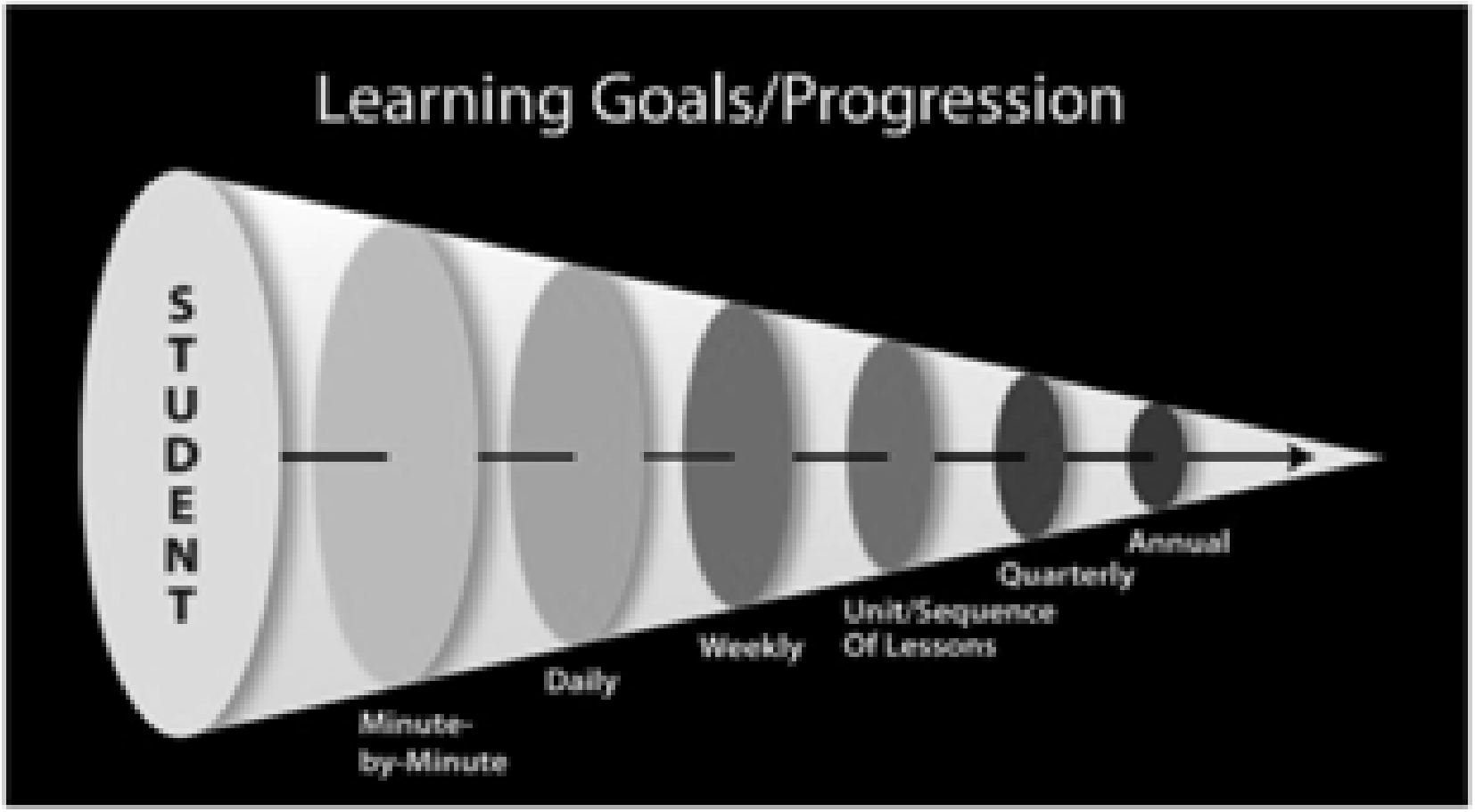
Standard #1: A student must use digital tools and resources for problem solving and decision making.				
CRITERIA (Benchmark)	ADVANCED	PROFICIENT	NEARING PROFICIENCY	NOVICE
1. Identify and investigate a problem and generate possible solutions.	A. identify a more detailed or complex problem B. investigate the problem using multiple digital tools C. generate multiple possible solutions using digital tools	A. identify a problem B. investigate the problem using digital tools C. generate possible solutions using digital tools	A. identify a problem with a limited understanding B. investigate the problem using digital tools with a limited understanding C. generate limited or simple solutions using digital tools	A. identify a problem with beginning skill and knowledge B. investigate the problem using digital tools with a beginning understanding C. generate incomplete solutions using digital tools with a beginning understanding
2. Collect data and information using digital tools.	A. compile multiple examples of data B. use multiple digital tools to collect data C. use multiple digital tools to collect information	A. give an example of data B. collect data with a digital tool C. collect information using digital tools	A. give a example of data with limited understanding B. collect data with a digital tool with limited understanding C. rely on a single tool to collect information with limited understanding	A. give an example of data with beginning understanding B. collect data with a digital tool with beginning understanding C. collect information using digital tools with a beginning understanding
3. Organize collected data and information using a variety of digital tools.	A. uses a novel approach to create and record categories used for organizing data B. organize collected data using a unique digital tool C. draws complex connections to important information D. quickly decide how to	A. create and record categories to be used for organizing data B. organize collected data using a digital tool C. determine which information is useful D. decide how to record information E. organize information	A. uses a simple approach to create and record categories used for organizing data B. organize collected data using a simple digital tool C. has a limited understanding of what information is useful D. decide how to record	A. create and record categories used for organizing data with a beginning understanding B. organize collected data using a conventional tool C. has a limited perception of which information is useful D. decide how to record

Information Literacy/Library Media

Performance Rubrics for Montana LM Content Standard 1: Benchmark 1-3: Grade 4

Standard #1: A student must identify the task and determine the resources needed.				
Criteria (Benchmark)	**Advanced**	**Proficient**	**Nearing Proficiency**	**Novice**
1. Define the problem	A. identify and narrow the topic with precision B. restate the problem or task in their own words with elaboration C. use enriched task related vocabulary and keywords D. formulate advanced questions or steps needed to solve the problem or task	A. identify the topic B. restate the problem or task in their own words C. use task related vocabulary and keywords D. formulate questions or steps needed to solve the problem or task	A. identify the topic incompletely B. restate the problem or task C. use some task related vocabulary and keywords D. formulate some questions or steps needed to solve the problem or task	A. identify the topic incompletely and unclearly B. restate the problem or task with inaccuracies C. use minimal task related vocabulary and keywords D. struggle to formulate questions or steps needed to solve the problem or task
2. Identify the types of information needed	A. construct a list of resources that includes unconventional resources	A. construct a list of possible resources	A. construct a basic list of possible resources	A. construct a limited list of possible resources
3. Choose from a range of resources	A. determine relevant resources to solve the problem or task using a variety of approaches	A. determine relevant resources to solve the problem or task	A. determine a limited number of relevant resources to solve the problem or task	A. choose an irrelevant source to solve the problem or task

Comprehensive Assessment System



Formative Assessment

- Assessment *FOR* Learning
  - Purpose: Provide ongoing feedback to improve learning
  - Timing: During the learning segment

(Burke, Kay. *Balanced Assessment: From Formative to Summative.* Bloomington, IN: Solution Tree, 2010)

Types of Assessment

- Obtrusive: interrupt the normal flow of instruction
- Unobtrusive: do not interrupt the normal flow of instruction
- Student-generated: students generate ideas about how they will demonstrate their current status

Marzano, Robert *Formative Assessment and Standards-based Grading.* Bloomington, IN: Solution Tree, 2010. pg 23-26

Describing and Reporting Student Performance

How did we do?

A B C D F

Standard #1: A student must identify the task and determine the resources needed.				
Criteria (Benchmark)	**Advanced**	**Proficient**	**Nearing Proficiency**	**Novice**
1. Define the problem	A. identify and narrow the topic with precision B. restate the problem or task in their own words with elaboration C. use enriched task related vocabulary and keywords D. formulate advanced questions or steps needed to solve the problem or task	A. identify the topic B. restate the problem or task in their own words C. use task related vocabulary and keywords D. formulate questions or steps needed to solve the problem or task	A. identify the topic incompletely B. restate the problem or task C. use some task related vocabulary and keywords D. formulate some questions or steps needed to solve the problem or task	A. identify the topic incompletely and unclearly B. restate the problem or task with inaccuracies C. use minimal task related vocabulary and keywords D. struggle to formulate questions or steps needed to solve the problem or task

Standards-based Grading and Reporting

A standards-based report card or reporting tool must clearly describe what students are expected to know and be able to do.

A standards-based report card or reporting tool must clearly describe a student's level of knowledge and performance of the standards.

Guskey, Thomas and Jane M. Bailey. *Developing Standards-based Report Cards.* Thousand Oaks, CA: Corwin Press, 2010.

Standards-based Grading and Reporting

"State clear expectations for work so that all teachers, students and parents know the criteria for quality and the requirements for earning a grade."

Burke, Kay. *From Standards to Rubrics in 6 Steps.* Rev. Ed. Thousand Oaks, CA: Corwin Press, 2006.

10-29-08 Ver.

Intermediate (Grade 4-5) Report School Year 2009-2010

Profile Key:

Academic Headings:		Subheads:
A = Excellent	★	= Strength
B = Above Average	+	= Acceptable
C = Average	P	= Shows Progress
D = Below Average	√	= Area of Concern
F = Failing		
TNG = Taught/Not Graded		
• = Adapted Curriculum		

Quarter	1	2	3	4
Days Absent	2.5	6		
Times Tardy	1	0		
Progress is affected by Absences/Tardies				

Quarter	1	2	3	4
Work / Study / Social Skills				
Follows directions	+	+		
Completes work on time	★	★		
Works independently	+	★		
Stays on task	+	+		
Uses time wisely	+	+		
Participates in class discussions/ activities/group	★	★		
Presents work neatly	+	+		
Talks at appropriate times	+	★		
Respects others	★	★		
Follows classroom rules	+	+		
Follows school rules	+	+		
Accepts constructive suggestions	+	★		
Accepts responsibility for own actions	+	★		
Special Areas				
Music TNG	(see attached sheet)			
Physical Education TNG	(see attached sheet)			
Library Skills TNG	(see attached sheet)			

Quarter	1	2	3	4
Communication Arts				
Reading	A	A-		
Spelling	A	A		
Math	A	A		
Basic Facts	+	+		
Computation	+	+		
Problem-solving	+	+		
Social Studies	A	A		
Science/Health	A	A		
Writing Continuum				

Novice	Nearing Proficiency	Proficient

1st Qu
2nd Quarte

1. CONFERENCE

2. Comments/Goals

adds a great creative component to our classroom. He has great ideas to express during discussion periods. Love the way he thinks. Should be reading 20 minutes each night.

3. CONFERENCE

4. Comments/Goals

Grade Placement for 2009-2010 School Ye

News from the Library

Rossiter Elementary School
Second Quarter 2009 – 2010

Laura Trapp, Librarian
ltrapp@helena.k12.mt.us 324-1519

Thank you! Thank you! Thank you!

Thank you for your support of the Book Fair last quarter! Once again, our library was able to earn over $1,000 in free books plus $1000 for our library budget to buy books and other library materials. ***We really appreciate your support!!***

SUPER3: PLAN ✦ DO ✦ REVIEW

At Rossiter School, we begin learning about the **Super3** process at a young age. In fact, your child might have come home singing our "Plan, Do, and Review" song at some time! The **Super3** is a great framework for helping us do schoolwork, become better at something, or make decisions in our lives. You can even try it at home! It's simple:

- **Plan:** Think about and decide what you need to do.
- **Do:** Do it! Carry out your plan.
- **Review:** Look back on what you did and think about whether you were successful and whether you should do something different next time.

In Library Skills classes, we especially use the Super3 process when we do research, but we try to keep it in mind for all of our activities.

New Library Skills Activities

Kindergarten, first, and second grade students have been learning about the **Caldecott Medal**, which is awarded to an artist of a picture book each year.

Kindergarten students continue to have a story and short lesson, check out books, and sometimes work on a project. We have practiced listening for information and retelling stories. We've read several stories which used the idea of the "Twelve Days of Christmas" song, discussing similarities and differences. We also compared the Caldecott Medal winning **The Snowy Day** book with a video version of the story.

First grade students have practiced alphabetical order while looking at the arrangement of the Everybody section of the library, and are beginning to practice finding books in this section. We have practiced listening for information and giving credit to the author and illustrator of a story. We have compared different versions of the same stories and most recently we have compared the Caldecott Honor book **Don't Let the Pigeon Drive the Bus** with the video version of the story. As an extra added bonus, we "met" Mo Willems (in the video), the author and illustrator, and he taught us how to draw the famous Pigeon!!

Second grade students have practiced listening for information, taking notes, and giving credit to the author and illustrator of a story. They have practiced logging into the Library Catalog with their ID number to see what items they have checked out and whether they are overdue. We have also compared different versions of the same stories, sometimes using Tumblebooks (http://www.tumblebooklibrary.com) stories. Most recently we have compared the Caldecott Medal winning book **Officer Buckle and Gloria** with the video version of the story. We

Report Example: Grade 1

Student Name:

MT Science Standard 1: Students, through the inquiry process, demonstrate the ability to design, conduct, evaluate, and communicate results and reasonable conclusions of scientific investigations.	B. Write a testable question with teacher guidance

Assignment/Activity	Task Criteria	Score/Performance Level
Oct 10 Question Words Activity	1. Accuracy-correct question words/punct./vocab highlighted 2. Completion-all question words/punct./vocab underlined	2/Nearing Proficient
Oct 12 Science Vocab/Question Activity	1. Accuracy-correct question words/punct./vocab highlighted 2. Completion-all question words/punct./vocab underlined	2/Nearing Proficient
Oct 14 Science Question Activity	1. Accuracy-correct question words/punct./vocab highlighted 2. Completion-all question words/punct./vocab underlined	3/Proficient

Resources to Help You Help Your Child:

www.big6.com
www.nsta.org
Etc.

Science Performance Criteria:

Novice:	•B. Student, struggles to generate appropriate questions with teacher guidance.
Nearing Proficiency:	•B. Student generates questions with teacher guidance that may or may not be testable.
Proficient:	•B. Student generates a testable question with teacher guidance
Advanced:	•Student generates a testable question without teacher guidance.

Information Literacy Performance Criteria:

Novice:	• A. listen and retell problem or task with errors • B. retell few keywords • C. listen and retell the topic omitting most details • D. listen to the steps needed to solve the problem or task with frequent redirection
Nearing Proficiency:	• A. listen and retell problem or task with limited details • B. retell some keywords • C. listen and retell the topic with limited details • D. listen to the steps needed to solve the problem or task with some redirection
Proficient:	• A. listen and retell problem or task • B. retell keywords • C. listen and retell the topic • D. listen and retell the steps needed to solve the problem or task
Advanced:	• A. listen and retell problem or task with insight and detail • B. retell keywords with enriched vocabulary • C. listen and retell the topic with elaborate detail • D. listen to and anticipate the steps needed to solve the problem or task

IL-LM Standard 1: Students will identify the task and determine resources needed.

Formative Assessment: Student-generated evidence

Criteria	Not Yet (0)	Yes (1)
A. I have identified the topic of the assignment: _____		
B. I have restated the assignment in my own words: _____		
C. I have used the assigned vocabulary and search words to describe the topic: _____		
D. I have created a list of questions to guide me through the assignment: _____		

Performance-based Report: 2nd Quarter 2010-2011
Student: SUSIE Q.

10TH GRADE	Academic Achievement	Information Literacy	Participation	Citizenship
Communication Arts	NP	NP	NP	NP
Social Studies	NP			
Mathematics	P			
Science	P			

Performance Level Key:

Novice (N): below the standard
Nearing Proficiency (NP): approaching the standard
Proficient (P): meets the standards
Advanced (A): exceeds the standards

See Attached Summary of Standards for 2nd Quarter

Reported Performance Areas:

Academic Achievement: indicators of student knowledge within a subject area.
Information Literacy: description of student performance in effectively using and producing ideas and information.
Participation: behavioral indicators for the student's interaction and engagement in the classroom.
Citizenship: behavioral indicators for the student's interaction within the school community.

Performance-based Report: 2nd Quarter 2010-2011 Student: Mike E. Summary of Standards	
Communication Arts	Writing 5.7 identify the purpose, audience, and format in one's own writing Writing 5.11 identify the owner of ideas and information (Communication Arts: W=Writing)
Science	1 (Rationale): Students must understand the process of science—how information is gathered, evaluated and communicated to others.
Social Studies	1.1 identify and practice the steps of an inquiry process (i.e. … create a new product,…)
Technology	2.3 communicate the results of research and learning with others using digital tools
Info Literacy	2.6 Create a product that presents findings. 4.2 Identify the owner of ideas and information

Checklist:

- ✓ Know the content standards and essential learning expectations.
- ✓ Analyze standards to target information and technology literacy standards in all content areas.
- ✓ Develop standards-based rubrics to assess student performance.
- ✓ Provide examples of student work to illustrate performance levels.
- ✓ Develop a standards-based reporting tool to communicate student learning with students and parents/guardians.

Selected Resources

Burke, Kay. *Balanced Assessment: From Formative to Summative.* Bloomington, IN: Solution Tree, 2010.

Burke, Kay. *From Standards to Rubrics in 6 Steps.* rev. ed. Thousand Oaks, CA: Corwin Press, 2006.

Burke, Kay. *How to Assess Authentic Learning.* 5th ed. Thousand Oaks, CA: Corwin Press, 2009.

Guskey, Thomas and Jane M. Bailey. *Developing Standards-based Report Cards.* Thousand Oaks, CA: Corwin Press, 2010.

Marzano, Robert *Formative Assessment and Standards-based Grading.* Bloomington, IN: Solution Tree, 2010.

Reeves, Douglas. *Elements of Grading: A Guide to Effective Practice.* Bloomington, IN: Solution Tree, 2011.

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